

REMARKS/ARGUMENTS

Claims 1-24 and 26-44 were previously pending. As noted above, claims 14 and 43 have been amended, and claims 45-50 have been added. Support for these amendments may be found throughout the Specification.¹ Thus, claims 1-24 and 26-50 are now pending.

Applicants respectfully request reconsideration of this application based on the following remarks.

Claim Rejections – 35 USC § 112 second paragraph

Claims 14 and 43 are rejected under 35 USC § 112, second paragraph, as being indefinite. Claims 14 and 43 have been amended in response to the rejection, and as such, the rejection is moot. Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejection of claims 14 and 43 under USC § 112 second paragraph.

Claim Rejections – 35 USC § 102

Claims 1, 2, 5-11, 14, 15, 18-21, 24, 26, 27, and 39-42 are rejected under 35 USC § 102(a) as being anticipated by Bauer (European Patent Publication No. EP 1133201 A1). Applicants respectfully traverse this rejection.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”²

Claim 1 recites in part, “the controlling means being arranged ... *to calculate* a high watermark value and a low watermark value *in response to the received parameter data and radio link resources data*.” The Office Action asserts the claimed subject matter is disclosed by Bauer and cites paragraph [0018] lines 1-5 as support. The cited text reads as follows:

[0018] The BVC queue 36 *is provided* towards its output end with *two timeslot triggers TS(l) and TS(u)* which function *in the conventional way*, that is, if the queue 36 exceeds the upper timeslot trigger TS(u), the DL requests scheduler 36 sends a request via interface Gb 16 to the SGSN 14 for an additional timeslot to be allocated. If an additional timeslot is allocated, the queue shortens as traffic throughput is increased, and the queue length falls below the upper trigger TS(u). (Emphasis added).

¹ See, e.g., Specification, paragraphs [0020], [0029]-[0042]

² *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999)(quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Further, the Office Action alleges that “the timeslot triggers depend on the length of the queue, and the length of the queue depends on the parameter data.” *See*, Office Action, Dated December 17, 2009, Page 3.

Contrary to these assertions and allegations, the cited text neither discloses nor suggests “the controlling means being arranged ... to calculate a high watermark value and a low watermark value in response to the received parameter data and radio link resources data,” as is recited in claim 1. The cited text merely discloses multiple triggers being provided to a queue to function in a conventional manner. As is noted in the present specification, “[s]imply selecting watermarks in advance is unlikely to be acceptable because of ... changing requirements.” *See*, Specification, paragraph [0026].

In contrast to the allegations in the Office Action, the cited text is silent with respect to how the timeslot triggers “depend” on the length of the queue. Rather, the cited text discloses that these triggers are merely “provided” for the BVC queue and function in a conventional way. In other words, although a determination of whether one of the triggers has been surpassed may depend on the length of the queue, the cited text does not disclose that the triggers are calculated “in response to the received parameter data and radio link resources data,” as is recited in claim 1. Accordingly, the allegations in the Office Action find no factual support in the cited text. As such, Bauer neither discloses nor suggests the recited subject matter of independent claim 1. Independent claims 14, 24 and 26 recited similar subject matter and, as such, Bauer fails to disclose or suggest independent claims 14, 24 and 26 for at least the same reasons as discussed above.

Claims 2, 5, 7-11, 15, 18-21, 27 and 39-42 depend, either directly or indirectly from independent claims 1, 14, 24 and 26 and, as such, Bauer fails to disclose or suggest independent claims 14, 24 and 26 for at least the same reasons as discussed above. Further, each claim includes independently allowable subject matter.

For example, claims 8, 20 and 33 recite in part that “parameter data” pertains “to the size of the largest data frame that may be transmitted.” The Office Action asserts this claimed subject matter is disclosed by Bauer and cites paragraph [0014], lines 1-4 as support. The cited text reads as follows:

[0014] In normal operation at normal traffic flow rates, a new call to a MS 22 is received over the Gb link 16, and the first Protocol Data Unit DL-UNITDATA

PDU passes to the queue 38 of the DL requests schedule 26. The scheduler 26 instructs the RLC/MAC blockers schedule 34 to allocate capacity, and a Temporary Block Flow (TBF) queue, such as queue 42, is set up for the called mobile.

Additionally, the Office Action asserts that the “allocation of capacity, includes the largest data frame that can be transmitted by a transmitter.” *See*, Office Action, Dated December 17, 2009, Page 7.

Contrary to these assertions, the cited text neither discloses nor suggests “parameter data pertaining to the size of the largest data frame that may be transmitted,” as is recited in the claimed subject matter. The cited text merely discloses that a new call to an MS is assigned capacity and a TBF queue, and is silent with respect to parameter data being “the largest data frame that may be transmitted.” Further, Bauer clarifies the meaning of allocating capacity by disclosing that one TBF queue is assigned to each active MS and the length of the BVC queue is the sum of all the MS queues. *See*, Bauer, paragraph [0017]. In other words, allocating capacity, as disclosed in Bauer, merely refers to assigning an MS queue to a new MS call. As such, the cited text neither discloses nor suggests the claimed subject matter.

As another example, claims 11 and 36 recite in part that the “radio link resources” include “an allocated coding scheme and a number of allocated transmission slots for the data frames to be transmitted.” The Office Action asserts the claimed subject matter is disclosed by Bauer and cites paragraphs [0024], [0026] and [0029] as support. A portion of the cited text reads as follows:

[0029] If the queue continues to lengthen and reaches the upper trigger BVC(u), the BVC flow controller 32 then calculates *the desired bit rate* to be received from the SGSN using as inputs the queue length and the former bit rate value sent in the BVC flow control message, and sends a BVC flow control message over connection 46 through the interface Gb to the SGSN, *requesting that data is send at a lower bit rate*. ... (Emphasis Added).

Additionally, the Office Action asserts that the “bit rate depends on coding scheme.” *See*, Office Action, Dated December 17, 2009, Page 8.

Contrary to these assertions, the cited text neither discloses nor suggests that the “radio link resources” include “*an allocated coding scheme* and a number of allocated transmission slots for the data frames to be transmitted,” as is recited in the claimed subject matter. For example, an allocated coding scheme refers to a designation for the current radio resource

allocation, as assigned by the MAC protocol. Further, for example, exemplary code schemes provided in the specification show schemes with different radio block payloads. *See*, Specification, paragraphs [0038]-[0042]. The cited text is silent with respect to radio link resources including an allocated coding scheme, and rather disclose a bit rate which may be varied to a desired rate. As such, the cited text neither discloses nor suggests the claimed subject matter.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejection of claims 1, 2, 5-11, 14, 15, 18-21, 24, 26, 27, and 39-42 under USC § 102(a) as being anticipated by Bauer.

Claim Rejections – 35 USC § 103

Claims 3, 4, 12, 13, 16, 17, 22, 23, 28, 29, 37, 38, 43 and 44 are rejected under 35 USC § 103(a) as being obvious over Bauer in view of Rajaraman (US Patent No. 5802310). Applicants respectfully traverse this rejection.

To establish a *prima facie* case of obviousness, all of the claimed features must be taught or suggested by the references and there must be some suggestion or motivation, in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.³

As noted above, Bauer fails to disclose or suggest the subject matter as presently recited. The addition of Rajaraman fails to cure the above-discussed deficiencies in Bauer, as Rajaraman fails to address these deficiencies. As such, any modification of Bauer by the teachings of Rajaraman fails to teach the recited subject matter of the present claims.

Specifically, claims 12, 22 and 37 recite in part to “calculate the high water value the calculated size of the largest frame and the calculated transmit rate.” The Office Action concedes Bauer fails to disclose the claimed subject matter recited in claim 12, and cites Rajaraman, column 4, lines 44-45 to cure the deficiency. The cited text reads as follows:

“By automatically adapting the first and second queue limits ***based on storage and data flow conditions***, the present invention can provide for efficient utilization of the data channel and queue.” (Emphasis added).

³ MPEP, section 2142.

Contrary to the assertion in the Office Action, the above cited text neither discloses nor suggests the claimed subject matter. The cited reference describes "storage" with respect to a "buffer storage capacity." By contrast, the cited reference is silent with respect to a calculated size of a largest frame. Additionally, the cited reference describes "data flow conditions" with respect to a "data flow rate." As discussed above, a calculated transmit rate, wherein the transmit rate is calculated using a code scheme as an input, is neither disclosed nor suggested by reference to a data flow rate. Accordingly, based at least on these deficiencies, any modification of Bauer by the teachings of Rajaraman fails to teach or suggest the recited subject matter. Thus, the cited references, in any combination, neither disclose nor suggest the claimed subject matter.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejection of 3, 4, 12, 13, 16, 17, 22, 23, 28, 29, 37, 38, 43 and 44 and 38 USC § 103(a) as being obvious over Bauer in view of Rajaraman.

New Claims

Applicants have added new claims 45-50 to recite subject matter to which they are entitled. As noted above, these new claims are fully supported throughout the Specification.

Additionally, claims 45-50 are allowable, as there is no combination of the cited references that discloses or suggests the subject matter recited by these claims. In particular, claims 45-50 are allowable for at least the same reasons discussed above with respect to claims 1, 14, 24 and 26 from which they depend, respectfully.

Therefore, Applicants respectfully request that the Examiner allow claims 45-50.

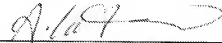
CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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